

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERC United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION | NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|-----------------------|-----------|-------------|----------------------|---------------------|-----------------------|--|--|
| 10/043,443 | | 01/09/2002 | John W. Barrus | 20412-06488 | 3265 | | |
| 758 | 7590 | 11/03/2004 | | EXAMINER | | | |
| FENWICK & WEST LLP | | | | PITARO, RYAN F | | | |
| SILICON VALLEY CENTER | | | | | <u>.</u> | | |
| 801 CALIFORNIA STREET | | | | ART UNIT | ART UNIT PAPER NUMBER | | |
| MOUNT | AIN VIEW, | CA 94041 | | 2174 | 2174 | | |

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | | S/ | | | | |
|---|---|---|--|---|------------|--|--|--|--|
| | | Application | No. | Applicant(s) | 10 | | | | |
| | | 10/043,443 | | BARRUS ET AL. | | | | | |
| | Office Action Summary | Examiner | | Art Unit | | | | | |
| · | | Ryan F Pitar | | 2174 | | | | | |
| ۔۔ Period for | The MAILING DATE of this communication | n appears on the c | over sheet with the c | orrespondence addres | ss | | | | |
| A SHC THE M - Extens after S - If the p - If NO p - Failure Any re | RTENED STATUTORY PERIOD FOR R IAILING DATE OF THIS COMMUNICATI ions of time may be available under the provisions of 37 C IX (6) MONTHS from the mailing date of this communication eriod for reply specified above is less than thirty (30) days, the maximum statutory p to reply within the set or extended period for reply will, by ply received by the Office later than three months after the I patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event, on. , a reply within the statutor period will apply and will e statute, cause the applica | however, may a reply be tim ry minimum of thirty (30) days xpire SIX (6) MONTHS from tion to become ABANDONEI | nely filed s will be considered timely. the mailing date of this commu D (35 U.S.C. § 133). | unication. | | | | |
| Status | | | | | | | | | |
| 1)⊠ F | Responsive to communication(s) filed on | 29 October 2004. | | | | | | | |
| • | | This action is non | ı-final. | | | | | | |
| • | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Dispositio | n of Claims | | | | | | | | |
| 5)□ (6)⊠ (7)□ (| Claim(s) 1-65 is/are pending in the application a) Of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) 1-65 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction as an Papers | hdrawn from cons | | | | | | | |
| 9)[] T | he specification is objected to by the Exa | miner. | | • | | | | | |
| | ☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | | |
| | Applicant may not request that any objection to | | · | ` ' | | | | | |
| | Replacement drawing sheet(s) including the control of the control | | | | · · | | | | |
| Priority ur | nder 35 U.S.C. § 119 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| Attachment(| s) of References Cited (PTO-892) | 41 |) Interview Summary | (PTO.412) | × | | | | |
| | of References Cited (P10-892) of Draftsperson's Patent Drawing Review (PTO-94) | | Paper No(s)/Mail Da | ite | • | | | | |
| | ation Disclosure Statement(s) (PTO-1449 or PTO/S No(s)/Mail Date | , |) Notice of Informal Pa) Other: | atent Application (PTO-152 | 2) | | | | |

Application/Control Number: 10/043,443 Page 2

Art Unit: 2174

DETAILED ACTION

1. Claims 1-65 have been examined.

Claim Objections

- 2. Claims 48,53 are objected to because of the following informalities: "associates" should be "which associates" in each claim. Appropriate correction is required.
- 3. Claim 49 is objected to because of the following informalities: Claim 49 appears to be directed to claim 48, wherein the claim should be dependent on claim 48.

 Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 45 recites the limitation "modifying the links" in line 1 of claim 49. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2174

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 34, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Capps ("Capps", US# 5,151,998).

As per independent claim 1, Capps discloses a method for generating one or more audio elements, the method comprising the steps of: receiving user input (Column 2 lines 24-25; Column 3 lines 8-12); creating a first audio element in response to the user input (Column 2 lines 24-25; Column 3 lines 8-12); displaying visual representation of the first audio element located spatially on a two-dimensional layout, wherein a display position of the visual representation is independent of audio data in the first audio element and controllable by user (Column 1 lines 41-48).

As per claim 2, which is dependent on claim 1, Capps discloses a method wherein the step of receiving user input includes receiving control signals, and wherein the step of creating a first audio element creates a data structure having a unique identification number field, and a spatial location field (Column 4 lines 3-6).

As per independent claim 34, Capps discloses a method of outputting audio signals, the method comprising the steps of: displaying a visual representation of at least one audio element located spatially on a two-dimensional layout (Column 1 lines 41-48), the visual representation of the audio element including an audio indicator (Figure 2); receiving user input (Column 2 lines 24-25; Column 3 lines 8-12); identifying a first audio element based on the user input (Column 2 lines 24-25; Column 3 lines 8-12); retrieving audio data for the identified audio element (Column 4 lines 3-4);outputting the retrieved audio data (Column 4 lines 5-6;output to the display screen) highlighting

Art Unit: 2174

sections of the audio indicator corresponding to a temporal ranges for which audio output has been provided (Column 3 lines 8-13).

As per claim 35, which is dependent on claim 34, Capps discloses a method wherein the audio indicator is a waveform, a length of the waveform relating to a time measurement of audio data and the height of the waveform relating to a measurement of energy of pitch in the audio (Column 3 lines 28-30).

7. Claims 62- 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Harmony Central ("Harmony", New Sound Forge 4.5).

As per independent claim 62, Harmony discloses a method for displaying media objects in conjunction with outputting audio data, the method comprising the steps of: identifying an audio element (Figure 1 item 22); retrieving audio data for the identified audio element (Figure 1 item 22); outputting the retrieved audio data (item 22; when played); retrieving a link object referring to the identified audio element (Figure 1 item 24; wherein the range links the two common objects); retrieving a media object referred to by the link object (figure 1 item 20; once linked by range a play button would play the media when the audio is played); and displaying the media object (Figure 1 item 20). As per claim 63, which is dependent on claim 62, Harmony discloses a method wherein the link object identifies an audio range in the audio data of the audio element to which it refers, and wherein the step of displaying is performed when an audio range specified in the link object is reached (Figure 1 item 24; media and audio elements correspond to the range which is there common link).

As per claim 64, which is dependent on claim 62, Harmony discloses a method wherein the link object identifies a range in the media object to which it refers, and wherein the stop of displaying, displays the range in the media object (Figure 1 item 28; wherein range is displayed at the top).

As per claim 65, which is dependent on claim 62, Harmony discloses a method wherein the link object identifies a range in the media object to which it refers, and wherein the step of displaying, displays the range in a separate window (Figure 1 item 30; wherein 30 is a global range).

8. Claims 44,50,51,55,57,58 are rejected under 35 U.S.C. 102(b) as being anticipated by Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per independent claim 44, sfv45 discloses a method of joining audio elements comprising: receiving user input identifying first and second audio elements to be joined (Figure 2 items 225 & 235); creating a new audio element (Figure 2 item 215); retrieving information from the first audio element and storing it in the new audio element (Figure 3 item 300); retrieving information from the second audio element and storing it in the new audio element (Figure 3 item 300); and deleting the first and second audio elements (Figure 3).

As per independent claim 50, sfv45 discloses a method of joining audio elements comprising: receiving user input identifying a first and second audio elements to be joined (Figure 4a items 410, 415); retrieving information from the second audio element

(Figure 4a item 415); storing the retrieved information from the second audio element in the first audio element (Figure 4b item 410); and deleting the second audio element (Figure 4b).

As per claim 51, which is dependent on claim 50, sfv45 discloses a method wherein the information from the second audio element includes an audio data signal (Figure b item 410).

As per independent claim 55, sfv45 discloses a method of splitting an audio element, the method comprising the steps of receiving user input identifying an original audio element to be split (Figure 5a item 540) and a splitting point (Figure 5a item 545); creating a first audio element (Figure 5a item 550); creating a second audio element (Figure 5a item 555); retrieving audio data for the original element (Figure 5a); storing audio data from the beginning to the splitting point in the first audio element(Figure 5b item 550), and the audio data from the splitting point to the end in the second audio element (Figure 5b item 555); and deleting the original audio element (Figure 5b).

As per independent claim 57, sfv45 discloses a method of splitting an audio element, the method comprising the steps of receiving user input identifying an original audio element to be split (Figure 6a item 600) and a splitting point (Figure 6a item 610); creating a new audio element (Figure 6a item 630); retrieving audio data for the original element (Figure 6a item 620); storing audio data from the splitting point in the original audio element to the end in the second audio element (Figure 6b item 630); and deleting the audio data from the splitting point to the end from the original audio element (Figure 6b item 600).

Art Unit: 2174

As per claim 58, which is dependent on claim 57, sfv45 discloses a method comprising the step of displaying visual representations of the original audio element and the new audio element located spatially on a two-dimensional layout (Figure 6b).

9. Claims 22-28 are rejected under 35 U.S.C. 102(b as being anticipated by Winamp ("Winamp", Winamp version 2)

As per independent claim 22, Winamp teaches a method for deleting audio elements comprising the steps of: receiving user input (Figure 1 item 21; highlight element). Responsive to user input, identifying an audio element to be deleted (Figure 1 item 32); determining a visual representation corresponding to the identified audio element (Figure 1 item 21); removing the determined visual representation from display (figure 1 item 21 and Figure 2); deleting the identified audio element from memory (Figure 2 where element 21 is not present); determining audio elements that have an ordinal value greater than the identified audio element (Figure 2); and retrieving and decrementing the ordinal value of each audio element determined to have an ordinal value greater than the identified audio element (Figure 2;12 songs 1-12 instead of 13 in Figure 1).

As per claim independent claim 23, Winamp discloses a method for reordering two or more audio elements, the method comprising the steps of receiving user input (*drag and drop*, Figure 3 item 113; *shuffle*); identifying a chosen set of audio elements to be reordered from the user input; identifying a new order for the chosen set of audio elements based on the user input (Figure 3; *wherein a new order can be seen by*

Art Unit: 2174

numbers on left as apposed to original track numbers item 116) determining a lowest ordinal value for the chosen set of audio elements; modifying an ordinal value of each of audio element in the chosen set of audio elements beginning with the lowest ordinal value and using the new order; and updating display of chosen set of audio elements to reflect the modified ordinal values (Figure 3 item 116; wherein the new order is seen).

As per claim 24, which is dependent on claim 23, Winamp discloses a method of further comprising the step of storing the modified ordinal values for the chosen set of audio elements (wherein storing of the numbers is inherent so that Winamp can keep track of the order).

As per claim 25, which is dependent on claim 23, Winamp discloses a method wherein the step of determining a lowest ordinal value for the chosen set of audio elements further comprising the steps of retrieving each audio element in the chosen set; retrieving an ordinal value for each audio element in the chosen set from its audio element (figure 3 item 116); and comparing the retrieved ordinal values to determine a lowest value (Figure 3 item 116; wherein 10.JackJohnson 11-F-StopBlues.MP3 is the lowest ordinal value).

As per claim 26, which is dependent on claim 23, Winamp discloses a method wherein the user input includes selecting a reordering mode and moving a cursor over visual representations corresponding to audio elements using a pointing device (Figure 4 item 412; *current value is 1*), and wherein the chosen set is determined by the visual representations over which the cursor crosses, and the new order is an order in which

the visual representations are crossed (Figure 4b item 414; changes ordinal value when cursor crosses, causing new order now of value 8).

As per claim 27, which is dependent on claim 26, Winamp discloses a method wherein the method further comprises a step of displaying a feedback as to which visual representations the cursor has been moved across and the order in which the cursor was moved across them (Figure 4b; wherein all elements which were crossed by cursor have new ordinal values 1-8).

As per claim 28, which is dependent on claim 23, Winamp discloses The method of claim 23, further comprising the steps of: determining whether there are any audio elements not chosen for reordering; if there are audio elements not chosen for reordering, identifying any unselected audio elements (Figure 4a item 419;2-13); determining an ordinal value of each unselected audio element (Figure 4b); modifying ordinal values of the unselected audio elements that have an ordinal value greater than the lowest ordinal value to a modified order (Figure 4b; wherein moving element 414 to position 8 causes a shift of the unselected ones to precede 8); and updating display of the unselected audio elements to reflect the modified ordinal values (Figure 4b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2174

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 3-8,10-13,17-19, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Schuur et al ("Schuur", US#.5,504,853).

As per claim 3, which is dependent on claim1, Capps fails to distinctly point out a first data field for audio input signal. However, Schuur teaches the method, wherein the step of receiving user input includes receiving audio input signal, and wherein the step of creating the first audio element includes storing representations of the audio input signal in an audio data field of the first audio element (Figure 4a; *initial display wherein there is a data field to store data*). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of Schuur. Motivation to do so would have been to provide a structure where the elements can be easily stored, retrieved, and modified at a later time.

As per claim 4, which is dependent on claim 3, Capps discloses the method wherein the step of displaying includes displaying an audio indicator within the visual representation of the first audio element, the audio indicator corresponding to the audio input signal (Figure 2).

As per claim 5, which is dependent on claim 4, Capps discloses the method wherein the step of displaying increases the size of the visual representation of the first audio element and the audio indicator based upon a duration of the audio input signal (Column 3 lines 28-29; lines 39-42).

Art Unit: 2174

As per claim 6, which is dependent on claim 4, Capps discloses the method wherein the audio indicator is a waveform, a length of the waveform relating to a time measurement of the audio input signal and the height of the waveform relating to a measurement of energy or pitch in the audio input signal (Column 3 lines 28-29).

As per claim 7, which is dependent on claim 4, Capps fails to distinctly point out colors in the graph relating to a measurement of energy. However, Official notice is taken that colors in the graph relating to a measurement of energy or pitch in the audio input signal is well known in the art examples of which can be seen in most commercial wave editors. Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching. Motivation to do so would have been to distinguish different levels of energy or pitch to allow for adjustment.

As per claim 8, which is dependent on claim 3, Capps discloses a method wherein the step of displaying includes providing an audio gauge indicating the amplitude of the audio input signal (Column 4 lines 20-27).

As per claim 10, which is dependent on claim 3, Capps fails to distinctly point out storing an ordinal value in a field of the element. However, Schuur teaches a method wherein the step of receiving user input includes receiving a signal indicating an ordinal value, and wherein the step of creating a first audio element includes storing the ordinal value in an ordinal field of the first audio element (Figure 4a; *initial display 1,2,...N*). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of Schuur. Motivation to do so

Art Unit: 2174

would have been to store the ordinal values so that they can be to be inserted or deleted at any position in a constant number of operations.

As per claim 11, which is dependent on claim 1, Capps fails to distinctly point out creating a second element independent of sequence or relationship. However, Schuur teaches a method further comprising the steps of: receiving additional user input (Column 6 lines 30-34); creating a second audio element in response to the additional user input (Column 6 lines 30-34); displaying a visual representation of the second audio element located spatially on a two-dimensional layout, wherein the display position of the visual representation of the second audio element is independent of a temporal sequence or relationship to the first audio element (Column 5 lines 60-65; Column 6 lines 3-6). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of Schuur. Motivation to do so would have been to separate each element making it easier to edit each element without affecting the other.

As per claim 12, which is dependent on claim 11, Capps fails to distinctly point linking the two elements together. However, Schuur teaches a method further comprising the steps of creating a link between the first audio element and the second audio element; and displaying a visual representation of the link as a connector between the visual representation of the first audio element and the visual representation of the second audio element (Column 7 lines 16-19). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of Schuur. Motivation to do so would have been to

Art Unit: 2174

provide some way of combining the two independent elements without making them depend on each other.

As per claim 13, which is dependent on claim 12, the modified Capps discloses a method wherein the step of creating a link includes the steps of: creating a link object (Column 7 lines 16-17); storing a link to the first audio element and an interval within the first audio element in the linking object (Figure 4a; *handle of fragment 2*); and storing a link to the second audio element and an interval within the second audio element in the linking object (Figure 4a; *handle*).

As per claim 17, which is dependent on claim 1, the modified Capps discloses a method wherein the step of creating the first audio element includes the step of assigning the audio element an ordinal value (Figure 4a; *fragment 1,2,...N*; Column 6 lines 49-54).

As per claim 18, which is dependent on claim 17, the modified Capps discloses a method wherein the step of assigning the audio element the ordinal value sets the ordinal value to be one plus the highest ordinal value for an existing element (Figure 4a; Fragment 1, 2, N; Column 6 lines 49-54).

As per claim 19, which is dependent on claim 17, Capps fails to distinctly point out displaying connecting lines to audio elements. However, Schuur teaches a method wherein the step of displaying reflects ordinal values by showing connecting lines between successive audio elements (Figure 4a; Fragments 1,2,....N). Therefore it would have been obvious to an artisan at the time of the invention to combine the

Art Unit: 2174

method of Capps with the current teaching of Schuur. Motivation to do so would have been to provide some visual means to make the invention more aseptically pleasing.

Claim 36 is similar in scope to claim 7 and is therefore rejected under similar rationale.

11. Claims 14,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Harmony Central ("Harmony", New Sound Forge 4.5).

As per claim 14, which is dependent on claim 1, Capps fails to disclose linking to a media object. However Harmony teaches a method wherein the step of receiving user input comprises receiving an identification of a media object while receiving an audio input signal; and wherein the method further comprises the step of creating a link between the identified media object and the first audio element (Figure 1 item 20; wherein sound is linked to the corresponding .avi media file). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of Harmony. Motivation to do so would have been to provide an audio element to any type of media to enhance a user's experience.

As per claim 15, which is dependent on claim 14, the modified Capps discloses a method wherein the identification of a media object includes a range in the media object, and the method further comprise the step of determining a range in the first audio element corresponding to when the identification of the media object was received (Figure 1 item 24), and wherein the step of creating a link stores a reference to

the identified media object, a reference to the first audio element (Figure 1 item 24), the range in the media object (Figure 1 item 20) and the range in the first audio element (Figure 1; wherein .avi and .wav file have been combined and linked via the range).

12. Claims 16,20,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Harmony Central ("Harmony", New Sound Forge 4.5) in further view of Schuur et al ("Schuur", US#.5,504,853).

As per claim 16, which is dependent on claim 14, Capps and Harmony fail to distinctly point out displaying a representation of the link. However, Schuur teaches a method wherein the step of displaying includes displaying a representation of the link (Column 7 lines 16-19). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified Capps with the current teaching of Schuur. Motivation to do so would have been to provide some visual means to make the invention more aesthetically pleasing.

As per claim 20, which is dependent on claim 1, Capps and Harmony fail to distinctly point out creating a link. However, Schuur teaches a method further comprising the steps of creating a link between the first audio element and a media object (Figure 1 item 20); and displaying a visual representation of the link as a connector between the visual representation of the first audio element and a visual representation of the media object (Column 7 lines 16-19). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of the modified Capps with the current teaching of Schuur. Motivation to do so would have

```

been to provide some way of combining the two independent elements without making them depend on each other.

As per claim 21, which is dependent on claim 20, the modified Capps discloses a method, wherein the step of creating a link includes the steps of creating a link object (Column 7 lines 16-17); storing a reference to the first audio element and an interval within the first audio element in the linking object (Figure 4a; *handle*); and storing a reference to the media object and an interval within the media object in the linking object (Figure 4a; *handle*).

13. Claims 37-39,42,43 rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per claim 37, which is dependent on claim 34, Capps fails to distinctly disclose highlighting being shading. However, sfv45 teaches a method wherein the highlighting is shading (Figure 1 item 35). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 37, which is dependent on claim 34, Capps fails to disclose highlighting the waveform in bold. However, sfv45 teaches a method wherein the audio indicator is a waveform and highlighting is rendering the waveform in bold (Figure 1 item 35; wherein bold is darkening the selection more than that of the non selecting).

Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 38, which is dependent on claim 34, Capps fails to disclose highlighting the waveform in a different color. However, sfv45 teaches a method wherein the audio indicator is a waveform and highlighting is rendering the waveform in bold (Figure 1 item 35; wherein color of the selection is different from that of non selected in this case blue). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 42, which is dependent on claim 34, Capps fails to distinctly point out a stop signal, which terminates output. However, sfv45 teaches a method further comprising the steps of: receiving a stop signal from the user; and terminating the outputting of the retrieved audio data (Figure 1 item 15). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of sfv45. Motivation to do so would have been to give the user complete control over audio elements.

As per claim 43, which is dependent on claim 34, Capps fails to disclose creating a new element signal. However, sfv45 teaches a method further comprising the steps of receiving a create new audio element signal from the user; and terminating the

outputting of the retrieved audio data (Figure 1 item 25). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Capps with the current teaching of sfv45. Motivation to do so would have been to give the user complete control over audio elements.

14. Claims 40,41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Winamp ("Winamp", Winamp version 2) in further view of Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per claim 40, which is dependent on claim 34, Capps fails to teach ordinal order of the audio elements. However, Winamp teaches a method wherein the step of displaying includes displaying a plurality of audio elements, and wherein the method further comprises the steps of: determining an ordinal number for the first audio element; determining whether there are any audio elements with an ordinal number greater than the ordinal number for the first audio element; identifying a second audio element with an ordinal number greater that the ordinal number for the first audio element; retrieving audio data for the second audio element; outputting the retrieved audio data for the second audio element (Figure 2; wherein at load of Winamp the program determines ordinal values and sorts them by value so if a number with a greater ordinal value is before the first element, then it is played). Therefore it would have been obvious to an artisan at the time of the invention to combine Capps with the teaching of Winamp. Motivation to do so would have been to keep an order to the audio

elements for organizational purposes. Capps and Winamp fail to distinctly point out highlighting sections of a waveform corresponding to a temporal range for which audio output has been provided. However, sfv45 teaches a method wherein highlighting sections of a waveform corresponding to a temporal range for which audio output has been provided (Figure 1 item 35). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified Capps and the teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 41, which is dependent on claim 40, the modified Capps teaches a method wherein the steps of retrieving audio data and outputting the retrieved audio data are performed after all the audio data for the first audio element has been output (Figure 2; wherein the playlist continues to play from 1 to 2 after 1 has completed or signaled by a user).

15. Claims 45-49,52-54,59,60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5) in view of Winamp ("Winamp", Winamp version 2).

As per claim 45, which is dependent on claim 44, sfv45 does not distinctly point out ordinal values. However, Winamp teaches a method wherein the information from the first audio element includes an ordinal value (Figure 1 item 21). Therefore it would have been obvious to combine the method of sfv45 with the teaching of Winamp. Motivation to do so would have been to establish some organization so that songs can be played in a certain order.

۶. .

As per claim 46, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of determining the ordinal value of the first audio element and using the determined ordinal value as the ordinal value for the new audio element (Figure 1; wherein songs 2-13 have been added in succession and ordinal values have been assigned).

As per claim 47, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of reducing by one the ordinal value of any audio elements having ordinal values higher than that of the first audio element (Figure 4b item 414; wherein 1-7 have lower ordinal values when their ordinal values where higher previously).

As per claim 48, which is dependent on claim 44, sfv45 fails to distinctly point out the step of modifying the links. However, Official Notice is taken that modifying links, which associates with second elements to be associated with the new element is well known in the art an example of which is a hierarchical tree like structure. When an element of the tree like structure is moved or joined to another element all of its depending nodes move with the element adjusting accordingly. Therefore it would have been obvious to an artisan at the time of the invention to combine sfv45 with the current teaching. Motivation to do so would have been to keep the structure consistent to prevent it from having dangling nodes.

Claims 49,53,54 are similar in scope to that of claim 44 and are therefore rejected under similar rationale.

Art Unit: 2174

٠.

As per claim 52, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of reducing by one the ordinal value of any audio elements having ordinal values higher than that of the first audio element (Figure 2).

As per claim 59, which is dependent on claim 57, the modified sfv45 discloses a method further comprising the steps of determining the ordinal value for the original audio element; storing a value of the determined ordinal value plus one as the ordinal value for the second audio element; and updating the display of the visual representations of the original and new audio elements to reflect the stored ordinal values (Figure 2; *items 1-12 all with ordinal values 1 higher than its previous*).

As per claim 60, which is dependent on claim 59, the modified sfv45 teaches a method further comprising the steps of determining any audio elements having an ordinal value greater that the ordinal value for the original audio element; and increasing by one the ordinal values of those determined elements having ordinal values higher than that of the original element (Figure 2; *items 1-12 all with ordinal values 1 higher than its previous*).

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Capps ("Capps", US# 5,151,998) in view of Schuur et al ("Schuur", US#.5,504,853) in further view of Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per claim 9, which is dependent on claim 3, the modified Capps fails to disclose a control button, which regulates input. However, sfv45 teaches a method wherein step of displaying includes displaying a control button, the control button beginning the logging of the audio input signal if the audio input signal is not being

٠,

Ìr

logged, and the control button ending the logging of the audio input signal if the signal is being logged (Figure 1 item 25). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified Capps with the teaching sfv45.

Motivation would have been to provide a way for the user to control the audio input.

17. Claims 56,61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5) in view of Schuur et al ("Schuur", US#.5,504,853).

As per claim 56, which is dependent on claim 55, sfv45 fails to distinctly point out updating a link to the new object. However, Schuur teaches a method further comprising the steps of determining any links to audio data from the splitting point in the original audio element to the end; updating a link object to refer to the new audio object (Column 7 lines 16-17); and updating the display of the visual representations of the original audio element, the new audio element and the links to reflect the new association (Figure 4a; wherein all links will still point to its original audio element). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of sfv45 with the teaching of Schuur. Motivation to do so would have been keep consistency between links to retain the hierarchical structure.

Claim 61 is similar in scope to that of claim 56, and is therefore rejected under similar rationale.

٠٠٠ ر

18. Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Harmony Central ("Harmony", New Sound Forge 4.5) in view of Schuur et al ("Schuur", US#.5,504,853).

As per independent claim 29, Harmony discloses a method of associating audio elements with a media object, the method comprising the steps of receiving user input identifying a media object and an audio element to be associated (Figure 1; .avi and .wav); Harmony fails to distinctly point out creating link objects. However, Schuur teaches creating a link object Column 7 lines 16-17); storing a reference to the media object and the audio element in the link object (Figure 4a); and displaying a representation of the link object with the representations of the media object and the audio element (Figure 1 item 74). Therefore, it would have been obvious to an artisan at the time of the invention to combine the method of Harmony with the teaching of Schuur. Motivation to do so would have been to provide some way of combining the two independent elements without making them depend on each other.

As per claim 30, which is dependent on claim 29, Harmony discloses a method comprising the steps of receiving user input identifying a range in the audio element; and storing the range in the link object (Figure 1 item 24).

As per claim 31, which is dependent on claim 30, Harmony discloses a method wherein the step of displaying further comprises displaying a visual representation of the audio element; displaying a visual representation of the media object; and displaying a connector between the visual representation of the audio element at the range and the visual representation of the media object (Figure 1 items 20,22,24).

As per claim 32, which is dependent on claim 29, Harmony discloses a method further comprising the steps of receiving user input identifying a range in the media object; and storing the range in the link object (Figure 1 item 24).

As per claim 33, which is dependent on claim 32, Harmony discloses a method wherein the step of displaying further comprises displaying a visual representation of the audio element (Figure 1 item 22); displaying a visual representation of the media object (Figure 1 item 20); and displaying a connector between the visual representation of the audio element and the range in the visual representation of the media object (Figure 1 item 24).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm, Monday through Thursday and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro Patent Examiner Art Unit 2174

KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Page 25

**RFP**